

**SEARCH REQUEST FORM**

Scientific and Technical Information Center

Requester's Full Name: Matthew Savage Examiner #: 67075 Date: 3-19-04  
 Art Unit: 1723 Phone Number 30 272-1146 Serial Number: 10/621,317  
 Mail Box and Bldg/Room Location: Remsen Results Format Preferred (circle): PAPER DISK E-MAIL  
TC70

**If more than one search is submitted, please prioritize searches in order of need.**

\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Duplex Strainer

Inventors (please provide full names): \_\_\_\_\_

Earliest Priority Filing Date: \_\_\_\_\_

*\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please provide a litigation search for  
 U.S. Patent 5,443,722. (for reissue application  
 10/621,317 listed above).

No case Reported

**STAFF USE ONLY**

	Type of Search	Vendors and cost where applicable
Searcher: <u>M. J. J. J.</u>	NA Sequence (#) _____	STN _____
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit <u>23.90</u>
Date Searcher Picked Up: <u>3/19/04</u>	Bibliographic <input checked="" type="checkbox"/>	Dr. Link _____
Date Completed: _____	Litigation <input checked="" type="checkbox"/>	Lexis/Nexis <u>40.00</u>
Searcher Prep & Review Time: <u>2</u>	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: <u>8</u>	Other _____	Other (specify) _____



# **STIC Search Report**

## **EIC 1700**

**STIC Database Tracking Number: 117312**

**TO: Matthew O Savage**  
**Location: REM 7C70**  
**Art Unit : 1723**  
**March 19, 2004**

**Case Serial Number: 10/621317**

**From: Kendra Mellerson**  
**Location: EIC 1700**  
**REM 4B28**  
**Phone: 571-272-2516**

**Kendra.Mellerson@uspto.gov**

### **Search Notes**

No Cases Reported

US\$5,443,722

PATNO IS 5443722

DATE: MARCH 19, 2004  
LIBRARY: PATENT  
FILE: ALL

Your search request is:  
PATNO IS 5443722

Number of PATENTS found with your search request through:  
LEVEL 1... 1

Your search request has found 1 PATENT through Level 1.  
To DISPLAY this PATENT press either the KWIC, FULL, CITE or SEGMENTS key.  
To MODIFY your search request, press the M key (for MODIFY) and then the ENTER key.

For further explanation, press the H key (for HELP) and then the ENTER key.

LEVEL 1 - 1 PATENT

1. 5443722 , August 22, 1995 , Duplex strainer, Desai, Ashvin D. - Lumberton, North Carolina, United States (US); Whritenour, Robert - Lumberton, North Carolina, United States (US), 252092 (08), Mueller Steam Specialty, St. Pauls, North Carolina, United States (US), 02, August 30, 1994 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., MUELLER STEAM SPECIALTY ROUTE 2, BOX 44 N.C. HIGHWAY 20 WEST ST. PAULS, NC 28354, Reel and Frame Number: 007115/0297 October 9, 2001 - SECURITY INTEREST (SEE DOCUMENT FOR DETAILS)., CHASE MANHATTAN BANK, AS COLLATERAL AGENT, THE P.O. BOX 2558 HOUSTON TEXAS 77252, Reel and Frame Number: 012188/0634

CORE TERMS: strainer, port, chamber, housing, straining, fluid, basket, ball valve, three-way, exit ...

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

5443722

<=1> GET 1st DRAWING SHEET OF 4

August 22, 1995

Duplex strainer

REISSUE: July 18, 2003 - Reissue Application filed Ex. Gp.: 1724; Re. S.N.  
10/621,317 (O.G. December 9, 2003)

APPL-NO: 252092 (08)

FILED-DATE: June 1, 1994

GRANTED-DATE: August 22, 1995

CORE TERMS: strainer, port, chamber, housing, straining, fluid, basket, ball  
valve, three-way, exit ...

5443722 OR 5,443,722

Your search request has found no CASES.

To edit the above request, use the arrow keys. Be sure to move the cursor to the end of the request before you enter it.

To enter a new search request, type it and press the ENTER key.

What you enter will be Search Level 1.

For further explanation, press the H key (for HELP) and then the ENTER key.

Current session 19/03/2004

Query/Command : FILE PLUSPAT

QUESTEL - Time in minutes : 0,59  
The cost estimation below is based on Questel's  
standard price list  
Estimated cost : 0.59 USD  
Cost estimated for the last database search : 0.59 USD  
Estimated total session cost : 0.59 USD

Selected file: PLUSPAT

PLUSPAT - (c) Questel-Orbit, All Rights Reserved.  
Comprehensive Worldwide Patents database  
New Patent Citation Commands & FAM Citation Report - see INFO PATCITE  
GB Citations Now Available in PlusPat  
GB citations have been added to over 200,000 corresponding GB records in  
PlusPat. Coverage starts in the 1980's and is updated monthly.  
PlusPat now covers cited references from US, EP, PCT, FR and now GB.  
Last update of file: 2004/03/10 (YYYY/MM/DD) 2004-10/UP (basic update)

Search statement 1

Query/Command : US5443722/PN

\*\* SS 1: Results 1

Search statement 2

Query/Command : PRT FULL NONSTOP LEGALALL

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1 / 1 PLUSPAT - ©QUESTEL-ORBIT - image

PN - US5443722 A 19950822 [US5443722]  
TI - (A) Duplex strainer  
PA - (A) MUELLER STEAM SPECIALTY (US)  
PA0 - Mueller Steam Specialty, St. Pauls NC [US]  
IN - (A) DESAI ASHVIN D (US); WHRITENOUR ROBERT (US)  
AP - US25209294 19940601 [1994US-0252092]  
PR - US25209294 19940601 [1994US-0252092]  
IC - (A) B01D-029/27  
EC - B01D-029/35 B01D-029:96  
PCL - ORIGINAL (O) : 210253000; CROSS-REFERENCE (X) : 055343000

055344000 055484000 137625210 137625430 210340000 210420000  
210452000 210470000

- DT** - Basic
- CT** - US3679060; US4274445; US4496463; US4606820; US4921598
- STG** - (A) United States patent
- AB** - A duplex strainer for straining material includes a housing, housing inlet port through which material enters the housing under pressure for straining and an outlet port through which strained material exits the housing. The housing includes a first strainer chamber having the first and second ports in separate fluid communication with the housing. A second strainer chamber includes third and fourth ports in separate fluid communication with the housing. The first port opposes the third port and the second port opposes the fourth port. A valve control structure includes a first three-way ball valve disposed within the housing for controlling fluid flow between the first port, third port and the housing. A second three-way ball valve is disposed within the housing to control fluid flow between the housing, second port and fourth port.

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*1 / 1 LGST - ©EPO*

- PN** - US5443722 A 19950822 [US5443722]
- AP** - US25209294 19940601 [1994US-0252092]
- ACT** - 19940830 US/AS02-A  
ASSIGNMENT OF ASSIGNOR'S INTEREST  
OWNER: MUELLER STEAM SPECIALTY ROUTE 2, BOX 44 N.C. HIGHW;  
EFFECTIVE DATE: 19940822
- 19940830 US/AS02-A  
ASSIGNMENT OF ASSIGNOR'S INTEREST  
OWNER: DESAI, ASHVIN D.; EFFECTIVE DATE: 19940822
- 19940830 US/AS02-A  
ASSIGNMENT OF ASSIGNOR'S INTEREST  
OWNER: WHRITENOUR, ROBERT; EFFECTIVE DATE: 19940822
- 20031209 US/RF-A  
REISSUE APPLICATION FILED  
EFFECTIVE DATE: 20030718
- UP** - 2003-51

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*1 / 1 CRXX - ©CLAIMS/RRX*

- PN** - 5,443,722 A 19950822 [US5443722]
- PA** - Mueller Steam Specialty
- ACT** - 20011009 REASSIGNED  
SECURITY INTEREST
- Assignor: UNITED DOMINION INDUSTRIES, INC. (DE CORPORATION)  
DATE SIGNED: 07/10/2001



Assignee: CHASE MANHATTAN BANK, AS COLLATERAL AGENT, THE  
P.O. BOX 2558 HOUSTON TEXAS 77252

Reel 012188/Frame 0634

Contact: SIMPSON THACHER & BARTLETT ROBYN GREENBERG ESQ  
425 LEXINGTON AVENUE NEW YORK, NEW YORK 10017

20030718 REISSUE REQUESTED  
ISSUE DATE OF O.G.: 20031209  
REISSUE REQUEST NUMBER: 10/621317  
EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 1724

Reissue Patent Number:

Query/Command : FILE INPADOC

PLUSPAT - Time in minutes : 0,43  
The cost estimation below is based on Questel's  
standard price list

	Estimated cost :	1.03 USD
Records displayed and billed :	1	
	Estimated cost :	1.32 USD
Cost estimated for the last database search :		2.35 USD
Estimated total session cost :		2.94 USD

LGST - Time in minutes : 0,19  
The cost estimation below is based on Questel's  
standard price list

	Estimated cost :	0.23 USD
Records displayed and billed :	1	
	Estimated cost :	0.60 USD
Legal-Status informations :	1	
	Estimated cost :	0.50 USD
Cost estimated for the last database search :		1.33 USD
Estimated total session cost :		4.27 USD

CRXX - Time in minutes : 0,14  
The cost estimation below is based on Questel's  
standard price list

	Estimated cost :	0.25 USD
Records displayed and billed :	1	
	Estimated cost :	5.50 USD
Legal-Status informations :	1	
	Estimated cost :	0.50 USD
Cost estimated for the last database search :		6.25 USD
Estimated total session cost :		10.52 USD

LITA - Time in minutes : 0,01  
The cost estimation below is based on Questel's

standard price list

Estimated cost : 0.02 USD  
Cost estimated for the last database search : 0.02 USD  
Estimated total session cost : 10.54 USD

Selected file: INPADOC

You are now connected to INPADOC  
Covers 1968/1973 thru weekly updates (2004-11)  
For information on content, (...)INFO INPD.

Search statement 1

Query/Command : FAM US5443722/PN

1 Patent Groups

**\*\* SS 1: Results 5**

Search statement 2

Query/Command : FAMSTATE NONSTOP

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1 / 5 INPADOC - ©INPADOC

**PN** - CA 2139975 AA 19951202 [CA2139975]  
**TI** - DUPLEX STRAINER  
CREPINE DOUBLE  
**LA** - ENG  
**IN** - DESAI ASHVIN D [US]; WHRITENOUR ROBERT [US]  
**PA** - MUELLER STEAM SPECIALTY [US]  
**AP** - CA 2139975/95-A 19950111 [1995CA-2139975]  
**PR** - US 252092/94-A 19940601 [1994US-0252092]  
**IC** - B01D-035/28

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2 / 5 INPADOC - ©INPADOC

**PN** - GB 9500754 A0 19950308 [GB9500754]  
**TI** - DUPLEX STRAINER  
**PA** - CORE IND INC  
**AP** - GB 9500754/95-A 19950116 [1995GB-0000754]  
**PR** - US 252092/94-A 19940601 [1994US-0252092]

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3 / 5 INPADOC - ©INPADOC

**PN** - GB 2289930 A1 19951206 [GB2289930]

TI - DUPLEX STRAINER  
IN - DESAI ASHVIN D; WHRITENOUR ROBERT  
PA - CORE IND INC [US]  
AP - GB 9500754/95-A 19950116 [1995GB-0000754]  
PR - US 252092/94-A 19940601 [1994US-0252092]  
IC - B01D-035/12

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4 / 5 INPADOC - ©INPADOC

PN - GB 2289930 B2 19980128 [GB2289930]  
TI - DUPLEX STRAINER  
IN - DESAI ASHVIN D; WHRITENOUR ROBERT  
PA - CORE IND INC [US]  
AP - GB 9500754/95-A 19950116 [1995GB-0000754]  
PR - US 252092/94-A 19940601 [1994US-0252092]  
IC - B01D-035/12

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5 / 5 INPADOC - ©INPADOC

PN - US 5443722 A 19950822 [US5443722]  
TI - DUPLEX STRAINER  
IN - DESAI ASHVIN D [US]; WHRITENOUR ROBERT [US]  
PA - MUELLER STEAM SPECIALTY [US]  
AP - US 252092/94-A 19940601 [1994US-0252092]  
PR - US 252092/94-A 19940601 [1994US-0252092]  
IC - B01D-029/27

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1 / 1 LEGALI - ©EPO

PN - US5443722 A 19950822 [US5443722]  
AP - US25209294 19940601 [1994US-0252092]  
ACTE - 19940830 US/AS02-A  
ASSIGNMENT OF ASSIGNOR'S INTEREST  
OWNER: MUELLER STEAM SPECIALTY ROUTE 2, BOX 44 N.C. HIGHW;  
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19940830 US/AS02-A  
ASSIGNMENT OF ASSIGNOR'S INTEREST  
OWNER: WHRITENOUR, ROBERT; EFFECTIVE DATE: 19940822  
  
20031209 US/RF-A  
REISSUE APPLICATION FILED

EFFECTIVE DATE: 20030718

**UP** - 2003-51